Agilent G2847A
Digital I/O Module

Installation Guide

Agilent Technologies

Notices

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Safety Notices

CAUTION

A **CAUTION** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a **CAUTION** notice until the indicated conditions are fully understood and met.

WARNING

A WARNING notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood and met.

Installing the Digital I/O Module

This installation guide describes how to install the Digital I/O Module (kit G2847A) into an Agilent 3000 Micro GC.

This accessory can only be installed into GCs with serial numbers equal to or greater than US10211002. Units with serial numbers less than US10211002 can be upgraded if returned to the factory.

Check the instrument serial number listed on the back panel of your instrument, see Figure 1. If this accessory is not compatible with your GC, contact Agilent.

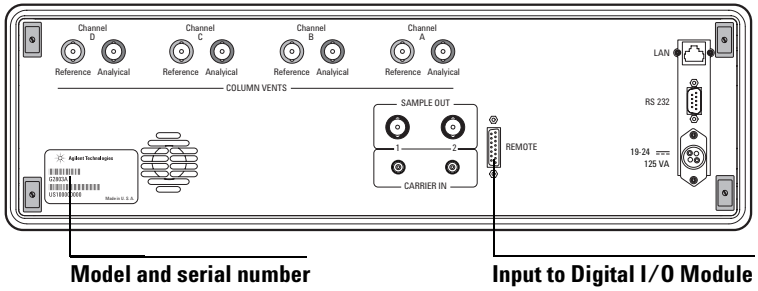

Figure 1 Back panel view

Kit contents

Table 1 Contents of kit G2847A

Description	Qty.
Digital I/O module	1
Ribbon cable	1
Screws	2
Electrostatic discharge (ESD) wrist strap	1

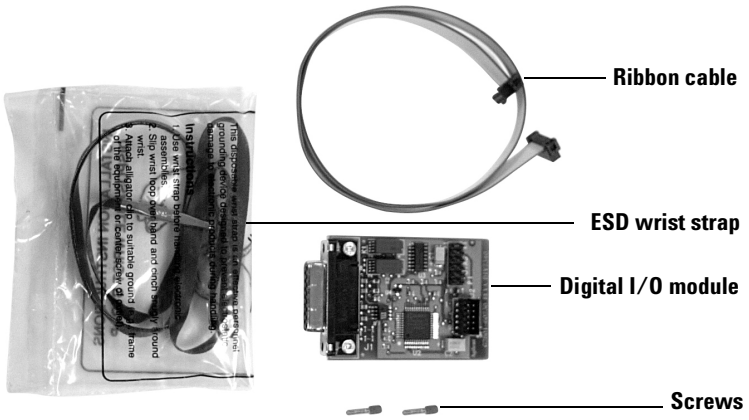

Figure 2 Kit G2847A parts

Tools required

Torx T-10 driver
Torx T-20 driver
Needle nose pliers (helpful for disconnecting cables)
Pozidriv screwdriver
Flat-bladed screwdriver

Before starting

Prepare for service

Before beginning work on an instrument, use the Agilent Cerity Networked Data System for Chemical QA/QC (Cerity) software to prepare the instrument for service. When the instrument is not in a sample run:

1. Set the heated zones where you will be working to < 40°C or OFF.
2. Turn OFF all gas flows.
3. Turn OFF any other feature that could be hazardous or waste resources.
4. When the heated zones reach < 40°C, open the ConnectAdmin utility.

CAUTION The instrument must be disconnected from Cerity before replacing hardware.

5. Select the instrument to be serviced in the “Instruments Enabled” list, and press **Disconnect**.

Open the instrument

CAUTION

During this process, you will expose the internal components of the unit. To avoid damaging the unit, turn the power switch off and disconnect all external power to the unit. Wear the supplied ESD wrist strap when working with or near interior components sensitive to electrostatic damage. Be sure to attach the clip to ground.

1 With a Pozidriv screwdriver, remove the two screws on each side of the top cover. Lift and remove the top cover.

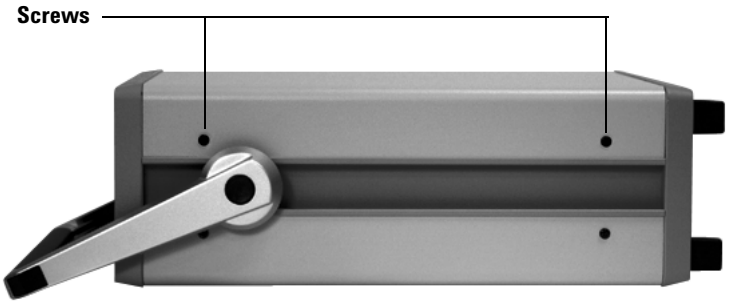

Figure 3 Removing the top cover (2-channel unit shown)

2 Unscrew and remove the four black feet from the back panel.

3 Carefully slide the main chassis out the back of the GC until the communication board is exposed. You do not have to remove it completely. Take care not to damage the ribbon cable near the upper side portion of each module.
See Figure 4.

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Figure 4 View of exposed upper ribbon cables

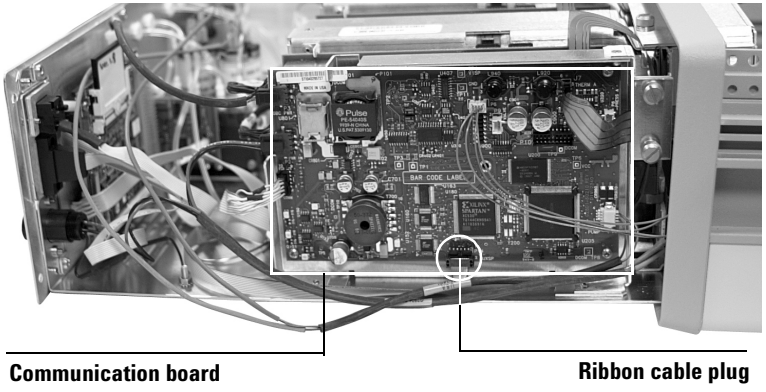

Figure 5 Side view of exposed chassis

To replace a defective Digital I/O Module

If replacing a defective Digital I/O Module, remove it.

1. Disconnect the ribbon cable from the communication board. See Figure 5.
2. Remove the two screws holding the module to the rear panel. Retain the screws for later use.
3. Remove the defective module and ribbon cable.
4. Slide the replacement module through the hole in the back panel (see Figure 6) so that the two threaded studs protrude through the back panel. Use the screws to secure it in place.

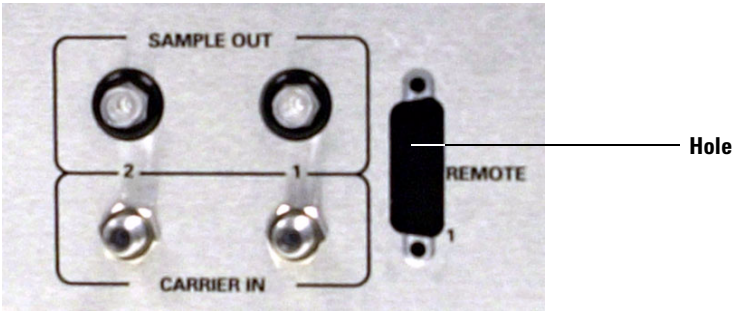

Figure 6 Back panel with module removed

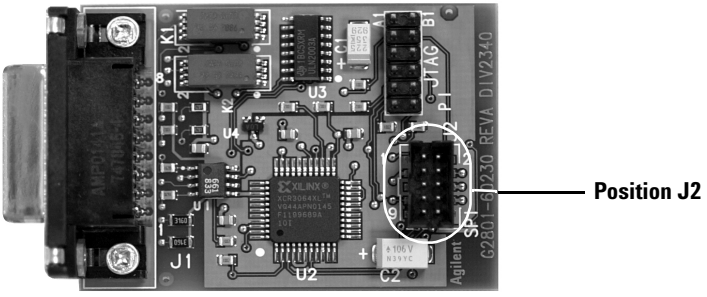

Figure 7 Digital I/O module with position J2 identified

5 Attach one end of the ribbon cable to Digital I/O Module position J2.

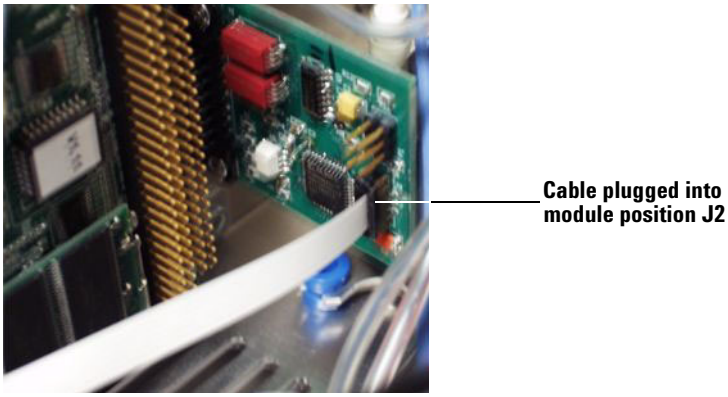

Figure 8 Digital I/O Module after installation

6 Attach the other end of the cable to the communication board at position P14.

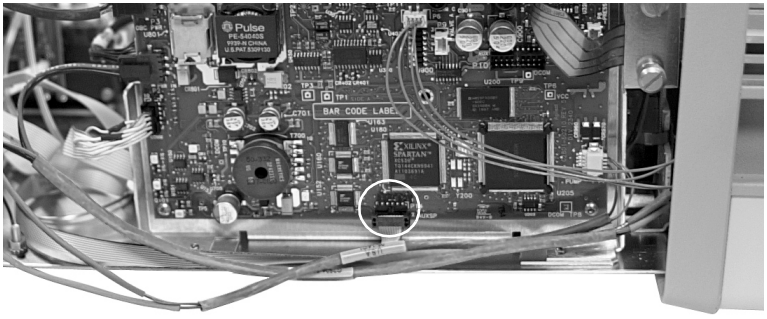

Figure 9 Side view of exposed chassis with position P14 identified

7 Carefully slide the chassis back into the instrument cabinet, taking care not to damage any wiring or cables.

8 Replace the top cover and all feet.

To install a new Digital I/O Module

1 If needed, use a flat-bladed screwdriver to pry the cover plate off the back panel of the instrument.

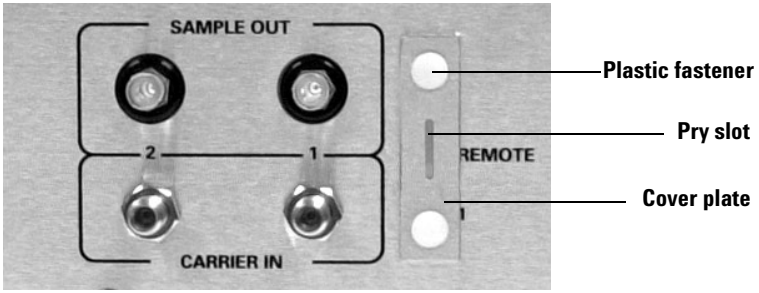

Figure 10 Back panel before installation of the Digital I/O Module

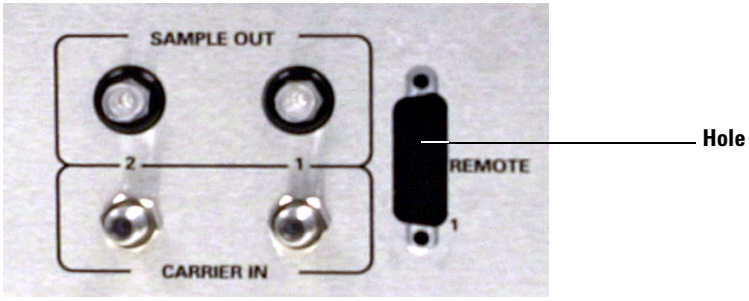

Figure 11 Back panel after removal of cover plate

2 Slide the new Digital I/O Module through the hole in the back panel so that the two threaded studs protrude through the back panel. Use the screws to secure it in place.

3 Now follow steps 5 through 8 in the replacement section on page 8.

Restore instrument to operational status

1. Turn on all gases and turn on the instrument.
2. After approximately 3 minutes, use a web browser to open the GC web page. For example, if the GC's IP address is **10.1.1.101**, enter **http://10.1.1.101** in the browser's address line. If the GC does not respond, refer to your User Information CD-ROM.
3. From the GC's web page, select Config.
4. Open Cerity NDS Chemical QA/QC software (version A.04.01 or greater), and select the Sample Edit screen. Select a sample that uses the 3000 GC.
5. Now if the digital I/O Module is functioning properly, the "Wait for Instrument Start" checkbox will be enabled.
6. Refer to Cerity's help system for details on its use.

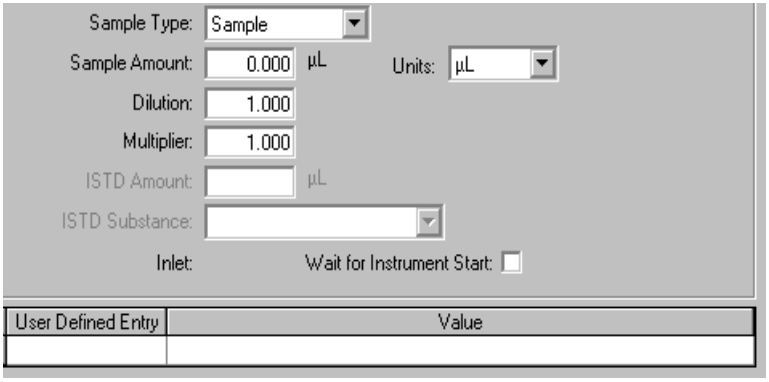

Figure 12 Sample edit screen

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